

Title (en)
DEVICE COMPRISING DIELECTRIC INTERLAYER

Title (de)
VORRICHTUNG MIT DIELEKTRISCHER ZWISCHENSCHICHT

Title (fr)
DISPOSITIF COMPRENANT UN DIÉLECTRIQUE INTERCOUCHE

Publication
EP 3276691 B1 20221102 (EN)

Application
EP 17182804 A 20170724

Priority
US 201615221885 A 20160728

Abstract (en)
[origin: EP3276691A1] A process for preparing a device and a device including a substrate; an interlayer disposed on the substrate, wherein the interlayer comprises a cured film formed from an interlayer composition, wherein the interlayer composition comprises: an epoxy compound; a polyvinyl phenol; a melamine resin; a solvent; an optional surfactant; and an optional catalyst; a source electrode and a drain electrode disposed on a surface of the interlayer; a semiconductor layer disposed on the interlayer, wherein the semiconductor layer is disposed into a gap between the source and drain electrode; a back channel interface comprising an interface between the semiconductor layer and the interlayer, wherein the interlayer serves as a back channel dielectric layer for the device; a dielectric layer disposed on the semiconductor layer; a gate electrode disposed on the dielectric layer. Also an interlayer composition and an organic thin film transistor comprising the interlayer composition.

IPC 8 full level
H01L 51/05 (2006.01); **H01L 51/10** (2006.01)

CPC (source: EP US)
H10K 10/464 (2023.02 - EP US); **H10K 10/88** (2023.02 - EP US); **H10K 77/10** (2023.02 - EP US); **H10K 2102/00** (2023.02 - US); **Y02E 10/549** (2013.01 - EP US)

Citation (examination)
US 2012100667 A1 20120426 - KOUTAKE MASAYOSHI [JP], et al

Designated contracting state (EPC)
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DOCDB simple family (publication)
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